

REMARKS/ARGUMENTS

The Final Office Action stated that the remarks and amendments filed on 10/20/09 are acknowledged.

Claims 1 to 4, 7 to 15, 21, 23, 25, 27, 29, 34 and 35 are pending. Independent Claim 1 has been amended. Claims 6 and 19 have been cancelled. New independent Claims 34 and 35 have been added. It is believed that the claims are allowable over the objection and rejection, so entry and allowance requested.

The Final Office Action stated: that, in light of the amendment of Claim 1 to recite the transitional phrase "consisting of", applicants' arguments, see page 6, filed 10/20/09, with respect to the rejection of Claims 1 to 33 under 35 U.S.C. §102(b) as being anticipated by Zhou et al. (WO 00/03692) have been fully considered and are persuasive; that, therefore, the rejection has been withdrawn; that, however, upon further consideration new ground(s) are made under 35 U.S.C. § 103(a) over Zhou et al. (WO 00/03692) in view of Zhou et al. (U.S. 6,017,561); and that, since the new ground(s) of rejection were necessitated by applicants' amendment, this action is made final. Applicants traverse this statement. The obviousness rejection fails as shown below.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 has been rejected under 35 U.S.C., second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants traverse this rejection,

The Final Office Action stated: that Claim 1 recites the transitional phrase "**consisting of**" which is considered closed language; that, however, Claim 1 also recites (in part d)

"... **optionally** one or more auxiliaries ..."; that it is unclear how a claim that recites closed language (i.e. "consisting of") can allow optional auxiliary ingredients; and that any other ingredients not encompassed by the "consisting of" language would be considered as excluded from the composition. The Examiner's position is untenable. The reason is that the Examiner did not include dependent Claims 6 and 19 (that are directly or indirectly dependent upon independent Claim 1) in this objection. Dependent Claims 6 and 19, without the word "optionally", recite "one or more auxiliaries [spelling] selected from the group consisting of". The Examiner did not assert that dependent Claims 6 and 19 were objected to so this objection of independent Claim 1 is in error or this Final Office Action is incomplete. Applicants request that a complete new Office Action be issued.

The Final Office Action stated that clarification is required. The objection, as shown above, is either in error or is incomplete.

This objection should be withdrawn.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

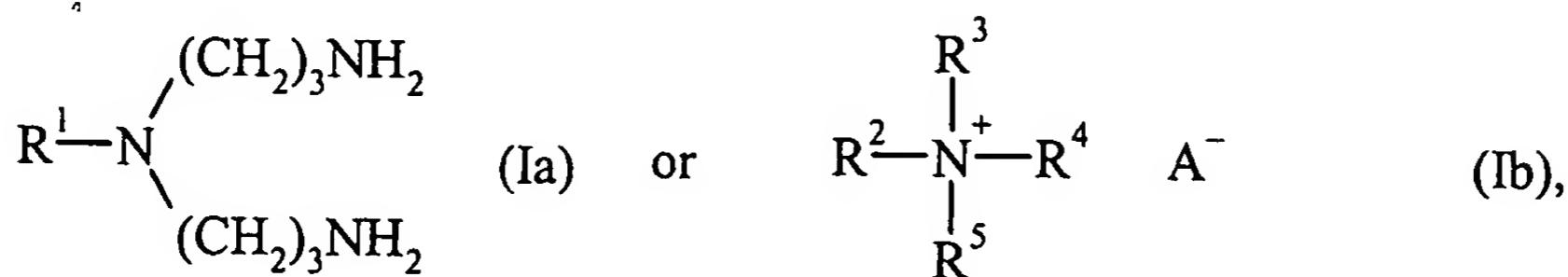
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 to 4, 6 to 15, 19, 21, 23, 25, 27 and 29 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Zhou et al., WO 00/03692, in view of Zhou et al., U.S. Patent No. 6,017,561 (Zhou '561 hereinafter). Applicants traverse this rejection.

Even if both rejection references are combined, the result still is not applicants' claimed Invention. The obviousness rejection clearly fails.

The Final Office Action stated that the claimed invention is a process of utilizing a disinfectant composition consisting of:

a) an amine and/or quaternary ammonium salt of the general formula:



wherein R^1 is C_{6-18} -alkyl,

R^1 is benzyl or C_{6-18} -alkyl.

R^3 is C_{1-18} -alkyl or $[(\text{CH}_2)_2\text{-O}]_n\text{R}^6$ where $n = 1-20$.

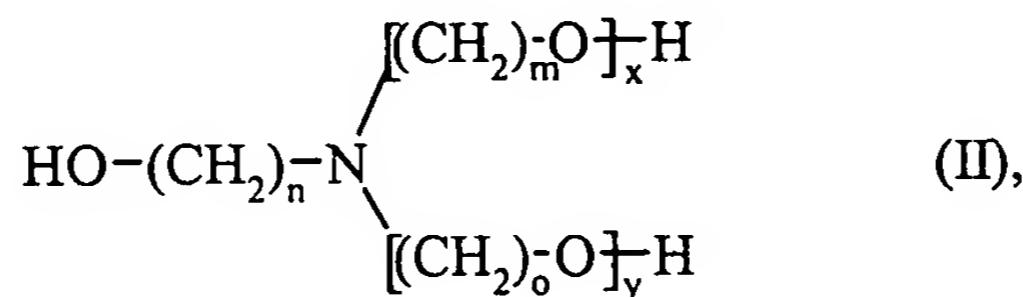
R^4 and R^5 independently of one another are C_{1-4} -alkyl,

R^6 is hydrogen or unsubstituted or substituted phenyl,

and A^- is a monovalent anion or one equivalent of a polyvalent anion of an inorganic or

organic acid; and

b) at least one alkanolamine of the general formula:



where n and, if present, m and o independently of one another have the value 2 or 3, and x and y independently of one another have the value 0 or 1, or a corresponding salt; in the mass ratio a):(b) of 20:1 to 1:20;

- c) water, as solvent; and
- d) optionally one or more auxiliaries selected from the group consisting of organic solvents, surfactants, complexing agents, fragrances and colorants.

The Final Office Action stated: that Zhou et al. teaches a method of decontaminating a surface by using a composition comprising a quaternary ammonium compound and water (Abstract); that quaternary ammonium compounds including C₁₂₋₁₆ alkyl dimethylbenzyl ammonium chloride, C₈/C₁₀ alkyl dimethyl ammonium chloride, di-C₈ alkyl dimethyl ammonium chloride and di-C₁₀ alkyl dimethyl ammonium chloride are disclosed (Page 8, line 42, to Page 9, line 15); that typical amounts of the quaternary ammonium compound range from about 0.01%-5% (Page 9, lines 25-30); that alkanolamines (including triethanolamine) are disclosed as components that comprise 0.01% to 5% of the composition (Page 16, lines 23 to 36); that the method for decontaminating a surface containing microorganisms by contacting the surface with the dispensable composition is also disclosed by Zhou et al. (Page 2, line 45 to Page 3, line1); that the surfaces that may be treated include bathroom surfaces, implements, etc., and include surfaces that harbor microorganisms, including viruses (Page 3, line 40 to Page 3, line 21); and that the composition can also be used as a cleaner and soil remover (Page 4, lines 29 to 32); that "Additional adjuncts in small amounts such as buffers, fragrances, dyes and the like can be included to provide desirable attributes of such adjuncts" (Page 5, lines 4 to 5); that Table III illustrates the virucidal efficacy of the composition when applied to a test surface; and that the complete inactivation of poliovirus type I is demonstrated (Page 20, Table III and Page 19, lines 38-40). Applicants traverse this statement. It is incomplete as to the disclosure of Zhou et al. Zhou et al. is an aerosol product and requires a propellant. Zhou et al. is therefore not relevant to either Zhou '561 or applicants' claimed invention. One ordinarily skilled in the art, even if they

looked at Zhou et al., would read Zhou et al., see it is at best that it is not relevant to applicants' claimed invention, and discard Zhou et al. More likely, the person ordinarily skilled in the art would, upon seeing that Zhou et al. requires/uses an aerosol composition requiring a propellant, would conclude that Zhou et al. directs away from applicants' claimed invention. The Examiner has not factually and/or legally proven otherwise in the record. Zhou '651 does not cure the defects of Zhou et al. in the search for applicants' claimed invention.

The Office Action stated Zhou et al. teaches aerosol compositions, and the propellant is required (Abstract).

The Final Office Action stated that applicants amended Claim 1 to replace the transitional phrase "comprising" with "consisting of" which is considered closed language and excludes the propellant required by Zhou et al.

The Final Office Action stated: that Zhou '651 teaches an antimicrobial cleaning composition that includes a quaternary ammonium compound (Abstract) and "...can be readily applied by conventional dispensing means. Preferably, the composition is sprayed or otherwise applied onto a surface ..." (Col.2, lines 1 to 6): and that the cleaning composition does not require a propellant. Applicants traverse this statement as being an incorrect description of the actual disclosure of Zhou '651 because it leaves out crucial parts of the invention of Zhou '651.

The composition of the invention of Zhou '651 requires the critical inclusion of an anionic polymer. The Examiner has no basis for destroying the invention of Zhou '651 by leaving out its crucial element of an anionic polymer. When the Examiner tries to use Zhou '651 as the secondary rejection reference, the Examiner does not have any basis for her (or one ordinarily skilled in the art) to not also have to bring over the crucial element anionic polymer as another component or as a replacement for the alkanolamine of Zhou et al. – in either case, the result is not applicants' claimed invention. The obviousness rejection fails. In fact, the attempted combining of the two rejection references shows the unobviousness of applicants' claimed invention and directs one ordinarily skilled in the art away from applicants' claimed invention.

The Examiner has not shown why one ordinarily skilled in the art would ignore a crucial part of the composition of Zhou '651 in the search for applicants' claimed invention. The Examiner has the burden of proof to establish that a crucial part of Zhou '651 would be ignored by one ordinarily skilled in the art who is seeing if Zhou '651 can be combined with Zhou et al. to arrive at applicants' claimed invention. In fact, Zhou '651's disclosure of the crucial anionic polymer shows that one ordinarily skilled in the art would discard Zhou '651 in the search for applicants' claimed invention because the Examiner has not shown any reason why one ordinarily skilled in the art would ignore the crucial anionic polymer of Zhou '651 and because the result of the combination of the Zhou et al. and Zhou '651 would not result in the applicants' claimed invention. The Examiner has not carried her burden of proof. It appears that the Examiner has incorrectly used forbidden hindsight in combining the two rejection references that form the obviousness rejection.

There is no motive of record for one ordinarily skilled in the art to use only part of Zhou '651, without its crucial anionic polymer (that is, crucial to the invention of Zhou '651), to inset into Zhou et al. in the quest for applicants' claimed invention. The Examiner has not carried her burden of proof.

The Final Office Action stated that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method of decontaminating a surface by applying a composition that is an effective virucidal and that contains a quaternary ammonium salt (such as the C₁₂₋₁₆ alkyl diethylbenzyl ammonium chloride, C₈/C₁₀ alkyl dimethyl ammonium chloride) and an alkanolamine (triethanolamine), as suggested by Zhou et al., modify the aerosol composition dispensing means such as by spraying a surface, as suggested by Zhou '651, and produce the instant invention. Applicants traverse the statement. The Examiner has not even addressed the issue of why one ordinarily skilled in the art would only use one part of the invention of Zhou '651 while discarding/ignoring the crucial part, i.e., anionic polymer, of the invention of Zhou '651. If Zhou '651 is used, its crucial anionic polymer comes along with it

(until the Examiner establishes in the record why one ordinarily skilled in the art would exclude the crucial anionic polymer).

The Examiner does not know what would be obvious to one ordinarily skilled in the art because the Examiner has not resolved/determined in the record the ordinary level of skill in the art (and not identified in the record the facts, reasons, analysis, etc., underlying such mandatory factual resolution/determination). The Examiner also has not established in the record the time when applicants made their claimed invention.

The Final Office Action stated that one of ordinary skill in the art would have been motivated to do this because MPEP 2141 states that it is obvious to apply a known technique to a known method ready for improvement to yield predictable results. The Examiner does not know what would, or would not, motivate one ordinarily skilled in the art. Also the Examiner has not proven in the record that a known technique, a known method and predictable results are involved. The Examiner has not carried her burden of proof.

The Final Office Action stated that Zhou '651 teaches that "... the antimicrobial compositions ... may exist as emulsions, suspensions, dispersions, solutions, or possibly, as other forms of liquid, such as microemulsions and liquid crystals." (Page 6, lines 14 to 21). One ordinarily skilled in the art would not use part of Zhou '651 without including the crucial anionic polymer.

The Final Office Action stated that one of ordinary skill in the art would find it obvious to use various conventional dispensing means such as spraying a liquid cleaning composition (suggested by Zhou '651) on a surface that are known in the art and evidenced by the teaching of Zhou '651. The Examiner does not know what would be obvious to one ordinarily skilled in the art – the Examiner has not resolved in the record the level of ordinary skill in the art.

The Final Office Action stated that one of ordinary skill in the art would have a reasonable expectation of success in eliminating the propellant from the aerosol composition of Zhou, apply the liquid composition by spraying a surface, and achieve the desired disinfection of

the surface. The Examiner does not know what one ordinarily skilled in the art would believe/know has a reasonable expectation of success.

The Final Office Action stated that, from the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. This statement is clearly in error. Zhou '651 drags in the anionic polymer so applicants' claimed invention is not even involved. The Examiner does not know anything about one ordinarily skilled in the art, so any statement by the Examiner regarding one ordinarily skilled in the art is of no import/meaning under 35 USC 103(a).

The Final Office Action stated that, therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary. This statement is in error in many ways. The Supreme Court's Graham and KSR decisions and Patent Office require that the level of ordinary skill in the art be resolved/determined. Without the factual determination of that factual inquiry, the framework of the three mandatory factual inquiries does not exist. Since the mandatory framework does not exist, no valid determination of obviousness (*prima facie* or otherwise) can exist – none exists in this case. The combination of the two rejection references does not result in applicants' claimed invention and would only result in a composition including an anionic polymer. The Examiner has not even shown that one ordinarily skilled in the art would combine (or even try to) the two rejection references (or that the rejection references are relevant) in the quest for applicants' claimed invention. The Examiner has not carried her burden of proof.

The Final Office Action stated: that, regarding instant Claim 1, the limitation of the process of utilizing a disinfectant composition would have been obvious [to whom?] over the method of decontaminating a surface by applying the composition that is an effective virucide, as disclosed by Zhou et al. (Page 2, line 45 to Page 3, line Table III); that the limitation of a quaternary ammonium salt of the general formula disclosed in Claim 1 would have been

obvious [to whom?] over the C₁₂₋₁₆ alkyl dimethylbenzyl ammonium chloride; that C₈/C₁₀ alkyl dimethyl ammonium chloride, di-C₈ alkyl dimethyl ammonium, chloride and di-C₁₀ alkyl dimethyl ammonium chloride taught by Zhou et al. (Page 9, lines 25 to 30); that the limitation of "at least one alkanolamine" of the general formula disclosed in Claim 1 would have been obvious [to whom?] over the triethanolamie disclosed by Zhou et al. (Page 16, lines 23 to 36); that the limitation of the mass ratio of I:II (or the mass ratio of the quaternary ammonium compound: the alkanolamine of 20:1 to 1:20 would have been obvious [to whom?] over the ratio of quaternary (ammonium compound: alkanoalmine that ranges from (O.)1Z%-5%), as taught by Zhou et al. (Page 9, lines 23 to 30 and Page 16, lines 23 to 36); and that the limitation of water as a solvent would have been obvious [to whom?] over the water in the composition taught by Zhou et al. (Abstract). Applicants' traverse this statement. Several parts of this statement is only speculation or supposition – Section 103(a) requires facts. This statement shows that the rejection is based on hindsight. Applicants have shown above that the combination of rejection references does not even result in applicants' claimed invention and does not make applicants' invention obvious to one ordinarily skilled in the art.

This statement makes several assertions the certain things would be obvious, but does not say to whom such thing would be obvious [so such assertions are meaningless under Section 103(a)].

The Final Office Action stated: that, regarding instant Claim 2, the limitation of the quaternary ammonium salt would have been obvious [to whom?] over the C₈/C₁₀ alkyl dimethyl ammonium chloride, di-C₈ alkyl dimethyl ammonium chloride and di-C₁₀ alkyl dimethyl ammonium chloride, as taught by Zhou et al. (Page 9. lines 25 to 30); that, regarding instant Claims 3 and 12, the limitation of the alkanolamine would have been obvious [to whom?] over the triethanolamine taught by Zhou et al. (Page 16, lines 23 to 36); that, regarding instant Claims 6 and 19, the limitation of the auxiliaries would have been obvious [to whom?] over the additional adjuncts in small amounts such as buffers, fragrances, and dyes that can be included,

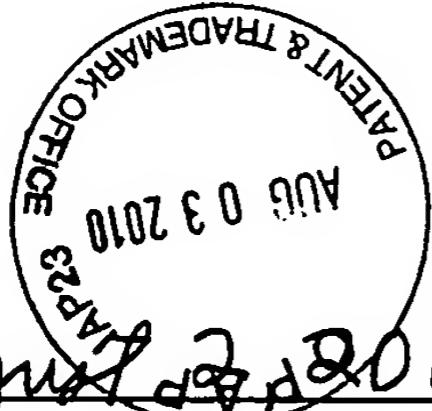
as taught by Zhou et al. (Page 5, lines 4 to 5). Applicants traverse this statement. The Examiner has not followed the requirements of Section 103(a) so the assertions are meaningless under the statute. Since independent Claim 1 is unobvious, these dependent claims are also unobvious.

The Final Office Action stated: that, regarding instant Claims 7 to 10, 21, 23, 25, and 27, the limitation of surface disinfection, instrument disinfection, and laundry disinfection would have been obvious [to whom?] over the treatment of bathroom surfaces, implements, and the use of the composition as a cleaner and soil remover, as taught by Zhou et al. (Page 4, lines 29 to 32); and that, regarding instant Claims 11 and 29, the limitation of the process wherein the virucidal agent of Claim 1 is utilized against parvoviruses, picornaviruses or polioviruses would have been obvious [to whom?] over the application of the composition to a surface and the complete inactivation of poliovirus type 1, as disclosed by Zhou et al. (Page 20, Table III and page 19, lines 38 to 40). Applicants traverse this statement. Independent Claim 1 has been shown to be unobvious, so such dependent claims are also unobvious.

Applicants request that this rejection be withdrawn.

Independent Claim 1 has been amended to remove item d) – the one or more auxiliaries – this was done to remove the objection to Claim 1 and keep the dependent claims dependent thereon. New independent Claim 35 has the content and language of independent Claim 1 before it was amended. New independent Claim 34 is the same as new independent Claim 35 except that the term “consisting” has been added on line 1 between “A process” and “of utilizing”. It is believed the new independent Claims 34 and 35 are also unobvious under Section 103(a) for the same reasons as given above.

Reconsideration, reexamination and allowance of the claims are requested



Date

August 2, 2010

Fisher, Christen & Sabol
1156 15th Street, N.W.
Suite 603
Washington, D.C. 20005
Tel.: 202-659-2000
Fax: 202-659-2015

Respectfully submitted,

Virgil H. Marsh

Virgil H. Marsh
Reg. No. 23,083

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop AAF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on August 2, 2010.

Virgil H. Marsh

FISHER, CHRISTEN & SABOL
1156 15th Street, N.W.
Suite 603
Washington, D.C. 20005